

Basin and Range basin-fill aquifers

Mineral County, NV

LOCATION.--Lat 38°47'55.8", long 118°43'38.6" referenced to North American Datum of 1983, in T.11 N., R.29 E., Mineral County, Hydrologic Unit 16050304.

GROUND-WATER RECORDS

WELL CHARACTERISTICS.--Depth 20 ft. Upper casing diameter 2 in; top of first opening 15 ft, bottom of last opening 20 ft.

WELL USE.--Observation well.

DATUM.--Land-surface datum is 3956 ft above National Geodetic Vertical Datum of 1929. Measuring point: Top of pvc casing at land surface, 0.0 ft above land-surface datum.

REMARKS.--Walker Lake is a perennial, natural terminal lake that became at-risk because of upstream agricultural diversions. Between 1882 and 1994, upstream diversions caused Walker Lake to decline about 140 feet and the total dissolved solids (TDS) concentrations to increase from 2,500 mg/L to 13,300 mg/L. The Lahontan cutthroat trout (LCT), a threatened species that is native to Walker Lake, has adapted to the high TDS of terminal basins. However, diversions have lowered lake levels and increased TDS to concentrations that threaten the survival of the LCT. The objectives of this project are to develop (1) an improved water budget for Walker Lake and (2) the capability to predict how changes in irrigation practices in and below Mason Valley will affect flows in the lower Walker River so alternatives for supplementing flows can be evaluated.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

[Measurement method: S, steel tape; T, electric tape. Water-level status: - - , static.]

Date	Water level	Measurement method	Water level status
Jul 21, 2005	10.00	S	--
Aug 9	9.12	T	--
18	9.13	T	--
Sep 8	9.24	T	--
27	9.31	T	--

Highest: 9.12 Aug 09, 2005

Lowest: 10.00 Jul 21, 2005